

Notice of Allowability

Application No.

09/940,280

Examiner

Benjamin R. Bruckart

Applicant(s)

CARTER, FREDERICK H.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6-13-06.
2. ☒ The allowed claim(s) is/are 1-9, 14-22 renumbered to 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20060613.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


BHARAT BAROT
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview and electronic mail with Chris Brokaw, Reg. No. 45,620.

The application has been amended as follows:

In the claims:

1. (Currently amended) In a process comprising at least one activity, a computer implemented method for performing an activity, comprising:

an application proxy receiving a first message, from a process management engine, to perform [[an]] a first activity which calls for invocation of a first service provided by a first service application, said first service being invocable using a first protocol, and said first service, when invoked, provides a first set of one or more results of performing said first service;

the application proxy obtaining a service definition for said first service, wherein the service definition for said first service comprises mapping information that maps one or more attributes associated with said first activity to one or more parameters used by said first service, wherein said first service definition for said first service comprises an indication that said first protocol is to be used to invoke said first service;

the application proxy selecting a first set of logic, from a plurality of sets of logic, based upon said indication in said service definition for said first service, wherein said first set of logic implements said first protocol;

the application proxy executing said first set of logic which implements said first protocol to generate a first service invocation, wherein said first service invocation is generated based upon, at least a portion of, said mapping information in the service definition, and is in compliance with said first protocol;

the application proxy sending said first service invocation to said first service application to invoke said first service;

the application proxy receiving a reply from said first service application which comprises said first set of one or more results of performing said first service; [[and]]

the application proxy providing at least a portion of said first set of one or more results of performing said first service to said process management engine to complete performance of said first activity;

the application proxy receiving a second message to perform a second activity which calls for invocation of a second service provided by a second service application, wherein said second service, when invoked, provides a second set of one or more results of performing said second service;

the application proxy obtaining a service definition for said second service, said service definition for said second service comprising an indication that a second protocol is to be used to invoke said second service;

the application proxy selecting a second set of logic based upon said indication in said service definition for said second service, said second set of logic implementing said second protocol;

the application proxy executing said second set of logic to generate a second service invocation, wherein said second service invocation is generated based upon at least a portion of said service definition for said second service, and is in compliance with said second protocol;

the application proxy sending said second service invocation to said second service application to invoke said second service;

the application proxy receiving a reply from said second service application which comprises said second set of one or more results; and

the application proxy providing at least a portion of said second set of one or more results to said process management engine to complete performance of said second activity.

2. (Original) The method of claim 1, wherein said protocol is an industry standard protocol.
3. (Original) The method of claim 2, wherein said protocol is SOAP (simple object access protocol).
4. (Original) The method of claim 2, wherein said protocol is ebXML.
5. (Original) The method of claim 1, wherein said activity has an activity definition associated therewith, and wherein said activity definition comprises said service definition.
6. (Original) The method of claim 1, wherein said service definition comprises an indication that said protocol is to be used to invoke said service.
7. (Original) The method of claim 1, wherein said service definition comprises access information for accessing said service.
8. (Original) The method of claim 7, wherein said access information comprises a URI (universal resource identifier).

9. (Original) The method of claim 7, wherein said access information comprises a service name.

10-13. (Cancelled).

14. (Currently amended) A computer readable medium comprising instructions which, when executed by one or more processors, cause the one or more processors to perform an activity, said computer readable medium comprising:

instructions for causing one or more processors to receive, at an application proxy, a first message, from a process management engine, to perform [[an]] a first activity which calls for invocation of a first service provided by a first service application, said first service being invocable using a first protocol, and said first service, when invoked, provides a first set of one or more results of performing said first service;

instructions for causing one or more processors to obtain, at the application proxy, a service definition for said first service, wherein the service definition for said first service comprises mapping information that maps one or more attributes associated with said first activity to one or more parameters used by said first service, wherein said service definition for said first service comprises an indication that said first protocol is to be used to invoke said first service;

instructions for causing one or more processors to select, at the application proxy, a first set of logic, from a plurality of sets of logic, based upon said indication in said service definition for said first service, wherein said first set of logic implements said first protocol;

instructions for causing one or more processors to execute, at the application proxy, said first set of logic which implements said first protocol to generate a first service invocation, wherein said first service invocation is generated based upon, at least a portion of, mapping information in the said service definition for said first service, and is in compliance with said first protocol;

instructions for causing one or more processors to send, at the application proxy, said first service invocation to said first service application to invoke said first service;

instructions for causing one or more processors to receive, at the application proxy, a reply from said first service application which comprises said first set of one or more results of performing said first service; [[and]]

instructions for causing one or more processors to provide, at the application proxy, at least a portion of said first set of one or more results of performing said first service to said process management engine to complete performance of said first activity;

instructions for causing one or more processors to receive, at the application proxy, a second message to perform a second activity which calls for invocation of a second service provided by a second service application, wherein said second service, when invoked, provides a second set of one or more results of performing said second service;

instructions for causing one or more processors to obtain, at the application proxy, a service definition for said second service, said service definition for said second service comprising an indication that a second protocol is to be used to invoke said second service;

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instructions for causing one or more processors to select, at the application proxy, a second set of logic based upon said indication in said service definition for said second service, said second set of logic implementing said second protocol;

instructions for causing one or more processors to execute, at the application proxy, said second set of logic to generate a second service invocation, wherein said second service invocation is generated based upon at least a portion of said service definition for said second service, and is in compliance with said second protocol;

instructions for causing one or more processors to send, at the application proxy, said second service invocation to said second service application to invoke said second service;

instructions for receiving, at the application proxy, a reply from said second service application which comprises said second set of one or more results; and

instructions for providing, at the application proxy, at least a portion of said second set of one or more results to said process management engine to complete performance of said second activity.

15. (Original) The computer readable medium of claim 14, wherein said protocol is an industry standard protocol.

16. (Original) The computer readable medium of claim 15, wherein said protocol is SOAP (simple object access protocol).

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17. (Original) The computer readable medium of claim 15, wherein said protocol is ebXML.

18. (Original) The computer readable medium of claim 14, wherein said activity has an activity definition associated therewith, and wherein said activity definition comprises said service definition.

19. (Original) The computer readable medium of claim 14, wherein said service definition comprises an indication that said protocol is to be used to invoke said service.

20. (Original) The computer readable medium of claim 14, wherein said service definition comprises access information for accessing said service.

21. (Original) The computer readable medium of claim 20, wherein said access information comprises a URL (universal resource locator).

22. (Original) The computer readable medium of claim 20, wherein said access information comprises a service name.

23-26. (Cancelled).

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Independent Claims 1 and 14 (renumbered to 1 and 10) among other things teach the limitations "for a computer implemented process comprising an activity that an application proxy receives a first message from a process management engine to invoke a first service provided by a first service application using a first protocol and to provide results of said first service; the application proxy obtains a service definition for said first service, wherein the service definition for said first service comprises mapping information that maps one or more attributes associated with said first activity to one or more parameters used by said first service, wherein said first service definition for said first service comprises an indication that said first protocol is to be used to invoke said first service; the application proxy then selecting a first set of logic from a plurality of sets of logic based upon said indication in said service definition, to implement said first protocol to generate a first service invocation based upon said mapping information in the service definition in compliance with said first protocol; the application proxy sending said first service invocation to said first service application to invoke said first service and to receive a reply from said first service application which comprises said first set of one or more results of performing said first service; and providing at least a portion of said first set of one or more results of performing said first service to said process management engine to complete performance of said first activity; the application proxy receiving a second message to perform a second activity which calls for invocation of a second service by a second service application, when invoked provides a second set of one or more results of performing said second service; the application completing similar steps of the first service invocation to provide results back to the

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process management engine.” The independent claims are further defined in claims 2-9 and claims 11-18.

The prior art does not teach the cited limitation.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

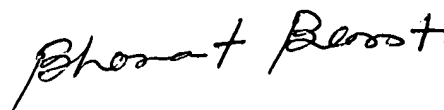
CORRESPONDANCE INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number 571-272-3982.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the examiner whose telephone number is 571-272-3982.

Benjamin R Bruckart
Examiner
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brb



**BHARAT BAROT
PRIMARY EXAMINER**